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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHIN, RICKY	

ART UNIT	PAPER NUMBER
2423	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/759,000	RITZ, EDOUARD	
	Examiner	Art Unit	
	RICKY CHIN	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-7 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/1/2011 has been entered.

Response to Arguments

2. Applicant's arguments filed April 1, 2011 have been fully considered but are moot in view of the new ground(s) of rejection(s).

Furthermore, the examiner would like to point out and suggest potential claim language to help clarify applicant's invention as to advance prosecution. For example, the present claims do not recite that the graphics memory and picture memory are two separate entities separate from another which would help clarify that the memories are not within and part of the same memory as illustrated in applicants Fig. 1. Furthermore, the current claims do not preclude the OSD processor and the mixer to also be a single component of which performs all of the functionality of the invention. For instance, the claims do not recite that the OSD processor and the mixer are two separate entities/components such that the OSD receives and separately processes only the first graphic when there is a possible overlay detected whereby the second graphic is sent in

a different/separate path to the picture memory to be separately processed, converted, and mixed with the first graphic at a mixer responsible for overlaying the graphics, the mixer being a separate component from the OSD processer; and that the OSD receives only the first and second graphics to be provided directly to the mixer when there is no detected overlay. As such, the presently recited claims have been rejected as set forth below in the claim rejections.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-7 and 10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Valmiki, et al., US 6,636,222 in view of Terao et al., US 2001/0055011, in further view of Li et al., US 2003/0043172, and in further view of Miyamoto, US 6,839,071.

Regarding claim 1, Valmiki discloses the same structural properties of an electronic apparatus (see "Summary of the Invention") comprising: a graphics memory storing a first and a second graphics object (for "graphics memory" and "pictures memory" refer to column 6, lines 11-19 of Valmiki);an OSD processor generating a first digital stream representing the first graphics object; a pictures memory containing a picture and generating a second digital stream from said picture; means for writing the

picture data to the picture memory (for "OSD processor" and "mixer" refer to column 5, lines 8-64 of Valmiki where graphics display system is OSD equivalent and video compositor is mixer equivalent. Furthermore, memory controller "reads and writes video graphics data to and from memory". Memory controller is also described as having "two substantially similar SDRAM controllers, one primarily for the CPU and the other primarily for the graphics display system, while either controller may be used for any and all of these functions").

Valmiki does not explicitly teach of a means for detecting overlaps between the first and the second graphics objects generating an overlap cue and of means for converting the second graphics object from said graphics memory into picture data responsive to said overlap cue indicating said overlap between the first and the second graphics object is generated. However, in the same field of endeavor, Terao (See [0056]-[0059]) discloses of an overlap detector for detecting windows which overlap and prepares an overlap table accordingly as shown in Figures 5-8). Thus, Terao teaches of generating an overlap cue for detecting an overlap of a first and second graphics object. Furthermore, Terao (See [0069]-[0076] and Fig. 19 discloses of display effect processing which is for example correction of color or correction of contrast, and processing according to the kind of display, whereby the same picture effect may apply to all the visible region rectangles or may selectively apply different picture effects to the respective visible region rectangles upon instruction. Hence, the graphic object is converted into picture data having different color and contrast. Moreover, it should also be noted that in order to determine a visible region, the location of the windows and

which window overlays the other window must be known. Thus, to apply picture effect to all visible regions an overlap cue must be generated in order to differentiate the overlapped window with the overlapping window to be able to apply the picture effect to the appropriate overlapping visible region.

Therefore, it would have been obvious to one of ordinary skill in the art to have combined the teachings of Valmiki to incorporate converting the second graphics object into picture data responsive to said overlap cue indicating said overlap between the first and the second graphics object is generated as taught by Terao as a whole for the benefit of being able to locate a region being displayed if a window is partially overlapped by another window so that a preferred display effect could be applied to affect desired regions which are being displayed in the presence of an overlap.

The combination of Valmiki and Terao does not explicitly teach of wherein the converted second graphics object is converted into a still picture data. However, converting a graphics object into a still picture data is notoriously well-known in the art as evidenced by Li (See [0003]-[0007] which discloses detection of an overlay of a graphic or text (2^{nd} graphic) from the video (1^{st} graphic) and compressing the overlay as a static image such that results in a more readable overlay). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the teachings of Valmiki and Terao to incorporate wherein the converted second graphics object is converted into a still picture data as taught by Li for the mere benefit of providing a more readable overlay, retrieval of logo detection/recognition,

character recognition such as by OCR, and video editing for video manipulation (See Li, [0003]-[0007]).

The combination of Valmiki, Terao, and Li does not explicitly teach of mixing means for mixing said first digital stream, generated by said OSD processor and representing said first graphics object, and said second digital stream, generated from said still picture data converted from said second graphics object from said graphics memory responsive to said overlap cue indicating overlap between the first and second graphics objects into a video signal. However, in the same field of endeavor, Miyamoto, teaches of mixing means for mixing said first digital stream, generated by said OSD processor and representing said first graphics object, and said second digital stream, generated from said still picture data converted from said second graphics object from said graphics memory responsive to said overlap cue indicating overlap between the first and second graphics objects into a video signal (See col.12 lines 49-65 and col. 13 lines 5-67 which discloses overlay options as well as drawing conditions for the overlaying options such as converting the drawing type to another drawing type, such as changing a video or image to another form of a picture or text for overlaying). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the teachings of Valmiki, Terao, and Li to incorporate mixing means for mixing said first digital stream, generated by said OSD processor and representing said first graphics object, and said second digital stream, generated from said still picture data converted from said second graphics object from said graphics memory responsive to said overlap cue indicating overlap between the first and second graphics objects into

a video signal as taught by Miyamoto for the benefit of providing greater efficiency and a more readable overlay such that the entirety of the overlay may be seen and without the need for time consuming frame by frame editing (See Li, [0004] and [0007]; Miyamoto, col.10 lines 1-14)

Regarding claim 3, the combination teaches an electronic apparatus according to Claim 1, the combination further teaches of comprising means for controlling the mixing means, means for conversion and means for writing as a function of the overlap cue (see column 13, lines 3-55 of Valmiki; Fig. 16-18 and [0069] -[0089] of Terao).

Regarding claim 4, the combination teaches the electronic apparatus according to Claim 1, the combination further teaches of comprising a video memory supplied by a decoder and linked to the mixing means (see "Summary of the Invention" column 2, lines 15-25 of Valmiki.)

Regarding claim 5, the combination teaches of the electronic apparatus according to Claim 1, the combination further teaches of wherein the video signal is transmitted to an output connector (See column 5, lines 1-5 of Valmiki, which discloses an "output for providing a video output signal.).

Regarding claim 6, the combination teaches the electronic apparatus according to Claim 1, the combination further teaches of wherein the means for converting the second graphics object into picture data are a piece of software executed by a main

controller (see column 5, lines 12-18 of Valmiki, which discloses "graphics data for display produced by any suitable graphics library software.).

Regarding claim 7, the combination teaches the electronic apparatus according to Claim 1, the combination further teaches in which the picture memory is a stationary picture memory (See "Background of the Invention" of Valmiki which discloses "may include graphics, text and video.") Graphics includes a stationary picture.

5. Claims 1, 3-7 and 10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Valmiki, et al., US 6,636,222 in view of Terao et al., US 2001/0055011, in further view of Li et al., US 2003/0043172, in further view of Huang et al., US 2003/0169372, and in further view of Miyamoto, US 6,839,071.

Regarding claim 10, the claim has been analyzed and rejected for the same reasons set forth in the rejection of claim 1. Moreover, the combination discloses the process for generating a video signal, comprising the following steps (See analysis of claim 1): reception of a command to display a first and a second graphics object (Valmiki, col. 17, lines 20-65 and col. 12-13; Terao, [0038]-[0040]); detection of a possible overlap between the first and second graphics object (Terao, [0056]-[0059] which discloses of an overlap detector for detecting windows which overlap and prepares an overlap table accordingly as shown in Figures 5-8); if absence of overlap, generation by an OSD processor of a digital stream representing the first graphics object and the second graphics object, and generation of a video signal based on the

digital stream (Terao, Fig. 4 and [0046]-[0050]; Valmiki, abstract and col. 17); if presence of an overlap: generation by an OSD processor of a first digital stream representing a first graphics object ; conversion of the second graphics object into a picture; writing of the picture to a memory; generation of a second digital stream from said still picture in the memory (See analysis of claim 1; for OSD processor refer to column 5, lines 8-64 of Valmiki where graphics display system is OSD equivalent and video compositor is mixer equivalent. Furthermore, memory controller reads and writes video graphics data to and from memory. Memory controller is also described as having two substantially similar SDRAM controllers, one primarily for the CPU and the other primarily for the graphics display system, while either controller may be used for any and all of these functions); mixing of the first digital stream and of the second digital stream; generation of a video signal from said mixture. (See col.5 and column 17, lines 45-55 of Valmiki, which discloses a compositor/mixer for blending and that windows may be specified to overlap one another and Fig. 7 of Terao which illustrates the mixed output of overlayed windows)

Therefore, it would have been obvious to one of ordinary skill in the art to have combined the teachings of Valmiki to incorporate converting the second graphics object into picture data if said overlap cue indicating said overlap between the first and the second graphics object is generated as taught by Terao as a whole for the benefit of being able to locate a region being displayed if a window is partially overlapped by another window so that a preferred display effect could be applied to affect desired regions which are being displayed in the presence of an overlap.

The combination of Valmiki and Terao does not explicitly teach of wherein the converted second graphics object is converted into a still picture data. However, converting a graphics object into a still picture data is notoriously well-known in the art as evidenced by Li (See [0003]-[0007] which discloses detection of an overlay of a graphic or text (2nd graphic) from the video (1st graphic) and compressing the overlay as a static image such that results in a more readable overlay). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the teachings of Valmiki and Terao to incorporate wherein the converted second graphics object is converted into a still picture data as taught by Li for the mere benefit of providing a more readable overlay, retrieval of logo detection/recognition, character recognition such as by OCR, and video editing for video manipulation (See Li, [0003]-[0007]).

The combination of Valmiki, Terao, and Li does not explicitly teach of wherein said OSD processor is unable to manage two graphic objects that overlap. However, in the same field of endeavor, Huang teaches of where the OSD processor may be set such that the OSD processor is disabled from processing video overlaying (See [0030]-[0041] and Fig. 4 S32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the teachings of Valmiki, Terao, and Li to incorporate wherein said OSD processor is unable to manage two graphic objects that overlap as taught by Huang for the benefit of decreasing fabrication costs and utilizing current hardware capability and being able to manage the OSD content within system memory or local memory for flexibility (See Huang, [0008], [0016], and [0042]).

The combination of Valmiki, Terao, Huang, and Li does not explicitly teach of mixing means for mixing said first digital stream, generated by said OSD processor and representing said first graphics object, and said second digital stream, generated from said still picture data converted from said second graphics object from said graphics memory responsive to said overlap cue indicating overlap between the first and second graphics objects into a video signal. However, in the same field of endeavor, Miyamoto, teaches of mixing means for mixing said first digital stream, generated by said OSD processor and representing said first graphics object, and said second digital stream, generated from said still picture data converted from said second graphics object from said graphics memory responsive to said overlap cue indicating overlap between the first and second graphics objects into a video signal (See col.12 lines 49-65 and col. 13 lines 5-67 which discloses overlay options as well as drawing conditions for the overlaying options such as converting the drawing type to another drawing type, such as changing a video or image to another form of a picture or text for overlaying). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the teachings of Valmiki, Terao,Huang, and Li to incorporate mixing means for mixing said first digital stream, generated by said OSD processor and representing said first graphics object, and said second digital stream, generated from said still picture data converted from said second graphics object from said graphics memory responsive to said overlap cue indicating overlap between the first and second graphics objects into a video signal as taught by Miyamoto for the benefit of providing greater efficiency and a more readable overlay such that the entirety of the overlay may

be seen and without the need for time consuming frame by frame editing (See Li, [0004] and [0007]; Miyamoto, col.10 lines 1-14)

Contact

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky Chin whose telephone number is 571-270-3753. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on 571-272-7296. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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